1.   (Original) A method in a transmitter for interleaving information bits from a data block into transmission bursts, each of the information bits being assigned with an index, the interleaving comprising computing positions of the information bits in the tranmission bursts such that the values of the indexes of at least a portion of the information bits are modified.

2.   (Original) A method as claimed in claim 1, wherein the modification of said indexes comprises shifting the values of the indexes to be modified by means of a shift term.

3.   (Original) A method as claimed in claim 2, wherein each information bit to be included in one of the transmission bursts is provided with an index number, and the sum of the index number of each information bit and the shift term forms the modified value of the index of said information bit for use in the computations.

4.   (Currently Amended) A method as claimed in ~~any preceding claim~~claim 1, comprising determining if modification of the values of the indexes is required.

5.   (Original) A method as claimed in claim 4, wherein the determination comprises determining if a half of the size of the data block can be divided by the depth of interleaving.

6.   (Original) A method as claimed in claim 5, wherein, if the parameters associated with the interleaving meet the criterion $\frac{K}{2} \bmod D = 0$, wherein

K is the size of the data block given in bits, and D is the interleaving depth given as the number of bursts,

the value of the index of an information bit is modified by means of a shift term s, said term being obtained from formula

$$s = \mathrm{int}\left[\frac{k}{K/2}\right],\ \text{wherein}$$

k is the value of the index of the information bit.

7.   (Currently Amended) A method as claimed in ~~any preceding claim~~claim 1, wherein the transmitter is used for transmitting in a GSM/EDGE radio access network

8.   (Original) A method in a receiver for de-interleaving information bits from received transmission bursts, each of the information bits being assigned with an index, the de-interleaving comprising:

determining if the value of any of the indexes has been modified before transmission of the transmission bursts; and

based on the determination, de-interleaving the information bits either based on modified values of the indexes or originally assigned values of the indexes.

9.   (Original) A transmitter comprising:

an interleaver for interleaving information bits from a data block into transmission bursts, each of the information bits being assigned with an index, and

means for computing positions of the information bits in the transmission bursts such that the values of the indexes of at least a portion of the information bits are modified before said interleaving.

10.   (Original) A receiver comprising:

a de-interleaver for de-interleaving information bits from received transmission bursts, each of the information bits being assigned with an index; and

means for determining if any of the indexes has been modified before transmission of the transmission bursts, the de-interleaver being arranged to de-interleave the information bits either based on modified values of the indexes or originally assigned values of the indexes based on the determination.